

Title (en)

COMPOSITE COATING SYSTEMS AND METHODS FOR LITHIUM METAL ANODES IN BATTERY APPLICATIONS

Title (de)

VERBUNDBESCHICHTUNGSSYSTEME UND VERFAHREN FÜR LITHIUM-METALL-ANODEN IN BATTERIEANWENDUNGEN

Title (fr)

SYSTÈMES ET PROCÉDÉS DE REVÊTEMENT COMPOSITE DESTINÉS À DES ANODES AU LITHIUM MÉTALLIQUE DANS DES APPLICATIONS DE BATTERIE

Publication

EP 3278383 A1 20180207 (EN)

Application

EP 16774089 A 20160330

Priority

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- US 2016024968 W 20160330

Abstract (en)

[origin: WO2016160958A1] A battery structure with a cathode, an electrolyte, and a lithium metal anode is coated with a composite coating including a mixture of a polymer and a reinforcing fiber. The cathode and the lithium metal are held apart by a porous separator soaked with the electrolyte. The reinforcing fiber is dispersed in the polymer matrix. The composite coating is porous or non-porous. The composite coating conducts lithium ions. The reinforcing fiber is chemically functionalized.

IPC 8 full level

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CPC (source: EP KR US)

H01M 4/134 (2013.01 - EP KR US); **H01M 4/1395** (2013.01 - EP KR US); **H01M 4/366** (2013.01 - EP US); **H01M 4/382** (2013.01 - EP KR US); **H01M 4/62** (2013.01 - KR); **H01M 4/622** (2013.01 - KR US); **H01M 4/628** (2013.01 - US); **H01M 4/661** (2013.01 - KR US); **H01M 10/052** (2013.01 - EP KR US); **H01M 10/0525** (2013.01 - KR US); **H01M 10/0565** (2013.01 - KR US); **H01M 2004/027** (2013.01 - US); **H01M 2300/0065** (2013.01 - EP US); **H01M 2300/0082** (2013.01 - US); **H01M 2300/0091** (2013.01 - KR); **Y02E 60/10** (2013.01 - EP)

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Designated extension state (EPC)

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